

Scaled data based on original data using
LM-79-2019 Approved Method: Electrical and Photometric Measurements of Solid-
State Lighting Products

Test Report Prepared for

Cooper Lighting Solutions

(formerly Eaton)

Brand: CORELITE

Report Number: P562221

Luminaire Tested: **SQ4-PW1-050U-100D-92765-1D-UNV-STD-W-4 (3500K)**

Issue Date: 7/30/2021

Test Information

Test Method: LM-79-2019
Report Number: P562221
REPORT IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2101-105-51, G2-2106-289-3)
Test Lab: INNOVATION CENTER
Issue Date: 7/30/2021
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: CORELITE
Catalog Number: SQ4-PW1-050U-100D-92765-1D-UNV-STD-W-4 (3500K)
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE WITH PERCEIVE WAVES CONTINUOUS LENS
DOWNLIGHT 1000 LUMENS PER FOOT
UPLIGHT 500 LUMENS PER FOOT
Light Source: 2700K/65000K CCT, 90 CRI LEDS, TUNED TO 3500K CCT
Ballast/Driver: ELECTRONIC DRIVER

Summary

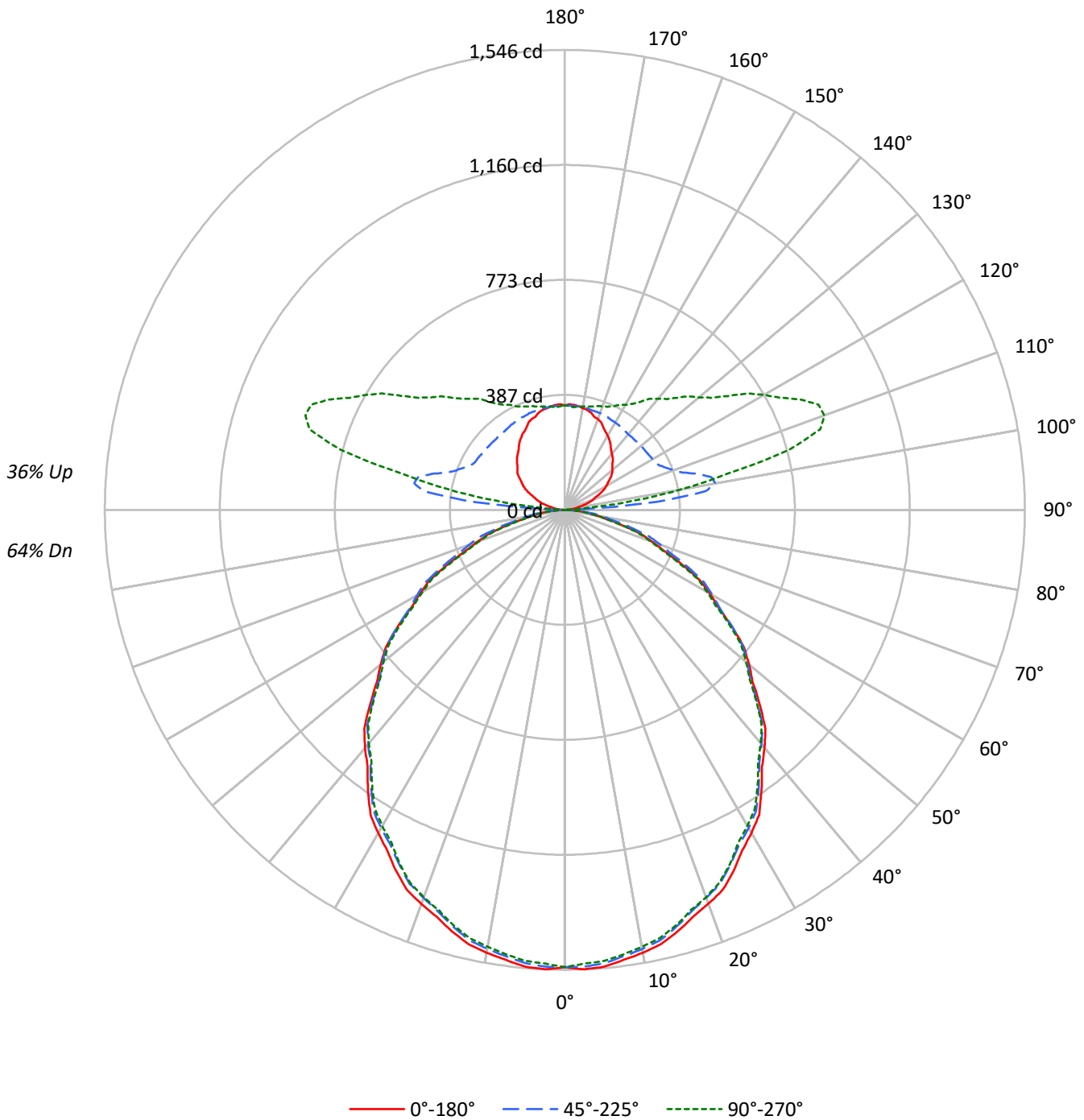
Lumens per Lamp: N/A
Luminaire Lumens: 6093.7 lumens
Efficiency: N/A
Efficacy: 104.7 lumens/watt
Spacing Criteria (0/90/45): 1.22 / 1.19 / 1.31
Luminous Opening: Rectangular (W 0.29' x L: 4' x H: 0')
CIE Type: Semi-Direct

Input Watts (W): 58.2
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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Luminous Intensity Polar Plot





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COEFFICIENT OF UTILIZATION - ZONAL CAVITY METHOD:

RF	20				20				20				20				20	
RC	80				70				50				30				10	0
RW	70	50	30	10	70	50	30	10	50	30	10	50	30	10	50	30	10	0
RCR																		
0	111	111	111	111	104	104	104	104	91	91	91	80	80	80	69	69	69	64
1	101	97	93	89	95	91	88	85	80	78	75	70	69	67	61	60	59	54
2	92	85	78	73	86	80	74	70	71	66	63	62	59	56	54	52	50	46
3	84	74	67	61	79	70	64	58	62	57	53	55	51	47	48	45	42	39
4	77	66	58	52	72	62	55	50	55	50	45	49	44	41	43	39	37	33
5	71	59	51	45	66	56	48	43	50	44	39	44	39	35	39	35	32	29
6	65	53	45	39	61	50	43	37	45	39	34	40	35	31	35	31	28	25
7	60	48	40	34	57	45	38	33	41	35	30	36	31	28	32	28	25	23
8	56	44	36	30	53	41	34	29	37	31	27	33	28	25	30	25	22	20
9	52	40	32	27	49	38	31	26	34	28	24	31	26	22	27	23	20	18
10	49	37	29	24	46	35	28	24	32	26	22	28	24	20	25	21	18	17

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	14183	14183	14183
5°	14275	14162	14099
10°	14161	14046	13969
15°	14010	13855	13803
20°	13843	13630	13603
25°	13649	13401	13360
30°	13361	13159	13072
35°	12982	12798	12722
40°	12576	12381	12332
45°	12088	11928	11875
50°	11586	11488	11411
55°	11046	11046	10871
60°	10372	10571	10197
65°	9490	9964	9254
70°	8365	9169	8147
75°	7144	8206	6951
80°	5542	6907	5611
85°	3589	5304	4732



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	144.8	2.4
10°-20°	408.7	6.7
20°-30°	606.2	9.9
30°-40°	709.3	11.6
40°-50°	706.1	11.6
50°-60°	609.8	10.0
60°-70°	438.9	7.2
70°-80°	230.2	3.8
80°-90°	57.1	0.9
90°-100°	160.1	2.6
100°-110°	455.6	7.5
110°-120°	436.5	7.2
120°-130°	345.5	5.7
130°-140°	277.3	4.6
140°-150°	217.1	3.6
150°-160°	158.8	2.6
160°-170°	98.4	1.6
170°-180°	33.4	0.5
0°-30°	1159.6	19.0
0°-40°	1868.9	30.7
0°-60°	3184.8	52.3
0°-90°	3911.0	64.2
90°-120°	1052.2	17.3
90°-150°	1892.1	31.0
90°-180°	2183.0	35.8
0°-180°	6093.7	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1537	1537	1537	1537	1537	
5°	1541	1524	1529	1525	1522	146
15°	1467	1448	1450	1448	1445	413
25°	1341	1318	1316	1308	1312	617
35°	1153	1137	1136	1126	1130	721
45°	926	918	914	912	910	715
55°	687	685	687	677	676	613
65°	435	448	456	438	424	431
75°	200	219	230	215	195	215
85°	34	44	50	47	45	45
90°	0	0	0	0	0	2
95°	17	69	310	107	66	20
105°	71	107	464	820	780	75
115°	132	159	352	746	876	130
125°	186	206	336	558	667	166
135°	227	246	332	471	532	175
145°	268	282	335	408	444	167
155°	306	313	343	368	384	141
165°	338	339	347	354	359	95
175°	354	352	351	349	346	34
180°	351	351	351	351	351	

TEST NUMBER: P562221

CATALOG NUMBER: SQ4-PW1-050U-100D-92765-1D-UNV-STD-W-4 (3500K)

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1537.2	1537.2	1537.2	1537.2	1537.2
2.5°	1545.9	1533.1	1537.2	1533.8	1526.4
5°	1541.3	1524.0	1529.1	1524.9	1522.3
7.5°	1525.5	1509.7	1513.4	1509.0	1507.4
10°	1511.5	1495.6	1499.3	1493.8	1491.1
12.5°	1495.2	1478.3	1481.9	1476.5	1474.9
15°	1466.8	1448.2	1450.5	1447.7	1445.1
17.5°	1433.7	1414.9	1415.3	1411.0	1410.4
20°	1409.9	1390.0	1388.2	1382.9	1385.5
22.5°	1383.9	1363.0	1361.1	1353.6	1357.3
25°	1340.8	1318.3	1316.4	1308.4	1312.4
27.5°	1291.0	1268.7	1268.8	1257.5	1261.7
30°	1254.1	1232.9	1235.2	1221.7	1227.0
32.5°	1215.1	1196.1	1197.2	1183.8	1189.1
35°	1152.6	1136.7	1136.3	1125.6	1129.5
37.5°	1088.6	1074.6	1072.4	1066.2	1067.2
40°	1044.2	1032.3	1028.0	1023.9	1023.9
42.5°	997.6	986.8	982.4	979.4	978.4
45°	926.4	918.4	914.2	911.5	910.1
47.5°	856.0	848.5	844.8	842.9	841.6
50°	807.2	801.9	800.4	796.3	795.0
52.5°	758.4	755.3	753.8	748.7	747.3
55°	686.7	685.3	686.7	677.1	675.8
57.5°	611.9	614.0	618.4	605.6	602.4
60°	562.1	567.4	572.9	557.9	552.6
62.5°	511.1	519.6	527.4	510.2	502.7
65°	434.7	448.0	456.4	438.5	423.9
67.5°	361.1	377.5	387.6	368.3	351.9
70°	310.1	328.7	339.9	320.6	302.0
72.5°	265.7	286.4	295.5	277.2	258.7
75°	200.4	219.0	230.2	214.9	195.0
77.5°	142.2	159.7	169.0	155.6	139.2
80°	104.3	122.8	130.0	118.9	105.6
82.5°	73.9	89.3	94.3	87.6	78.6
85°	33.9	44.5	50.1	47.3	44.7
87.5°	8.7	16.1	20.6	20.6	21.7
90°	0.0	0.0	0.0	0.0	0.0
92.5°	5.3	28.3	65.7	19.1	14.4
95°	17.4	69.0	310.0	107.3	66.1
97.5°	31.9	80.8	477.4	341.6	234.1
100°	42.1	87.8	513.7	520.4	400.8
102.5°	53.3	95.4	505.7	666.1	561.7
105°	70.8	107.4	464.3	820.1	779.6
107.5°	88.6	121.4	415.9	863.5	899.6
110°	100.9	131.6	388.1	846.9	927.9

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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	112.6	141.8	369.4	807.6	923.1
115°	131.6	159.0	352.1	745.8	875.8
117.5°	148.3	174.0	341.8	678.3	815.9
120°	161.7	183.2	340.7	639.6	771.6
122.5°	172.4	193.9	338.0	605.8	728.3
125°	185.7	206.0	336.0	557.6	666.7
127.5°	200.3	219.2	335.0	528.9	618.7
130°	207.8	226.7	333.4	508.8	587.2
132.5°	215.8	234.2	333.4	493.2	565.3
135°	227.1	246.1	332.0	471.0	532.4
137.5°	237.8	256.2	331.9	452.3	505.3
140°	245.8	264.8	331.3	436.7	487.7
142.5°	254.9	270.7	333.0	424.3	470.0
145°	267.9	281.6	334.7	407.7	444.2
147.5°	279.0	292.3	337.6	390.9	422.5
150°	288.6	297.7	338.7	385.3	407.5
152.5°	296.1	305.7	339.8	377.8	398.4
155°	306.0	313.1	342.7	368.4	383.5
157.5°	318.3	322.6	343.4	364.2	374.9
160°	324.7	327.9	346.0	361.0	370.1
162.5°	328.4	332.2	346.6	358.2	365.3
165°	338.0	339.3	346.7	354.2	359.4
167.5°	344.6	343.4	349.8	353.2	355.3
170°	346.7	346.1	348.7	349.4	352.1
172.5°	351.5	349.3	350.3	348.4	350.5
175°	354.1	352.1	350.7	348.7	346.0
177.5°	355.1	352.0	350.3	348.2	348.7
180°	351.4	351.4	351.4	351.4	351.4

(END OF REPORT)